

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1                   1.       (Currently Amended) A method of detecting a DNA in a crude milk  
2 sample, said method comprising the steps of:  
3                   (a) contacting said crude milk sample with a metal ion chelator;  
4                   (b) contacting said crude milk sample with a detergent;  
5                   (c) contacting said crude milk sample with a fluorescent label; and  
6                   (d) after steps (a), ~~and~~ (b), and (c), detecting said DNA fluorescent label in  
7 said crude milk sample thereby detecting the DNA in said crude milk sample.
- 1                   2.       (Original) The method of claim 1, wherein no protease is added to said  
2 milk sample.
- 1                   3.       (Original) The method of claim 1, wherein said detecting said DNA is  
2 quantitating said DNA, thereby determining the somatic cell count within the milk sample.
- 1                   4.       (Original) The method of claim 3, wherein said milk sample is a crude  
2 bovine milk sample.
- 1                   5.       (Original) The method of claim 1, wherein said metal ion chelator is a  
2 member selected from the group of EDTA, CyDTA, DHEG, DTPA-OH, DTPA, EDDA,  
3 EDDP, EDDPO, EDTA-OH, EDTPO, EGTA, HBED, HDTA, HIDA, IDA, Methyl-EDTA,  
4 NTA, NTP, NTPO, O-Bistren, and TTHA, o-phenanthroline, dipicolinic acid, and  
5 deferoxamine.
- 1                   6.       (Original) The method of claim 1, wherein said metal ion chelator is  
2 EDTA.
- 1                   7.       (Original) The method of claim 1, wherein said detergent is a non-ionic  
2 detergent.

1                   8.       (Original) The method of claim 7, wherein said non-ionic detergent is a  
2 member selected from the group of Octylglucoside, Digitonin, C12E8, Lubrol, Triton X-100,  
3 Nonidet P-40, Tween-80, Tween-20, BRIG 35, Dodecyl maltopyranoside, Heptyl  
4 thioglucopyranoside, Pluronic F-127, Genapol X-080, MEGA 10.

1                   9.       (Original) The method of claim 1, wherein said detergent is Tween-20.

1                   10.      (Cancelled)

1                   11.      (Original) The method of claim 1, wherein the pH of the milk sample  
2 is between 8.0 and 11.0, inclusive.

1                   12.      (Currently Amended) An analytical composition comprising a crude  
2 milk sample, a metal ion chelator, a fluorescent label, and a detergent, wherein said crude  
3 milk sample comprises a nucleic acid.

1                   13.      (Cancelled).

1                   14.      (Original) The composition of claim 12, wherein said nucleic acid is a  
2 DNA.

1                   15.      (Cancelled).

1                   16.      (Original) The composition of claim 12, wherein said composition  
2 does not include a protease.

1                   17.      (Original) The composition of claim 12, wherein said metal ion  
2 chelator is a member selected from the group of EDTA, CyDTA, DHEG, DTPA-OH, DTPA,  
3 EDDA, EDDP, EDDPO, EDTA-OH, EDTPO, EGTA, HBED, HDTA, HIDA, IDA, Methyl-  
4 EDTA, NTA, NTP, NTPO, O-Bistren, and TTHA, o-phenanthroline, dipicolinic acid, and  
5 deferoxamine.

1                   18.      (Original) The composition of claim 12, wherein said metal ion  
2 chelator is EDTA.

1                   19.      (Original) The composition of claim 12, wherein said detergent is a  
2 non-ionic detergent.

1                   20.    (Original) The composition of claim 19, wherein said non-ionic  
2 detergent is a member selected from the group of Octylglucoside, Digitonin, C12E8, Lubrol,  
3 Triton X-100, Nonidet P-40, Tween-80, Tween-20, BRIG 35, Dodecyl maltopyranoside,  
4 Heptyl thioglucopyranoside, Pluronic F-127, Genapol X-080, MEGA 10.

1                   21.    (Original) The composition of claim 12, wherein said detergent  
2 Tween-20.

1                   22.    (Currently Amended) A kit for detecting a nucleic acid in a crude milk  
2 sample comprising a metal ion chelator, a detergent, and a ~~detectable~~ fluorescent label ~~DNA~~  
3 ~~probe~~.

1                   23.    (Original) The kit of claim 22 further comprising a fluorescence  
2 detection system.  
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